

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application. The following listing provides the amended claims with deleted material crossed out and new material underlined to show the changes made.

1-19. (Canceled)

20. (Previously Presented) A method for creating a description of a user interface that transacts with a database having a data model containing a plurality of entities, the description being created using the data model of the database, the method comprising:

a) classifying the plurality of entities into entity types, the classifying comprising:

determining whether a first entity in the plurality of entities satisfies a first set of conditions; and

classifying the first entity as a first entity type upon determining that the first entity satisfies the first set of conditions; and

b) creating the description of the user interface based upon the classification of the plurality of entities.

21. (Previously Presented) The method of claim 20 wherein:

each entity in the data model describes a type of data object associated with the database; and

the classifying produces the first entity type for a first group of data objects and a second entity type for a second group of data objects, the data objects in the first group of data objects being updated in the database more frequently than the data objects in the second group of data objects.

22. (Previously Presented) The method of claim 21 wherein the first entity type is a Main entity type and the second entity type is an Enumeration entity type.

23. (Previously Presented) The method of claim 20 wherein the description is a generic description configured to be interpreted in different platforms or operating environments.

24. (Previously Presented) The method of claim 20 wherein the description is in eXtensible Markup Language (XML).

25. (Previously Presented) The method of claim 20 wherein the classifying and creating are performed automatically without human assistance.

26. (Currently Amended) The method of claim 20 further comprising[[:]]:
before the ~~receiving~~ classifying[[:]] obtaining a current data model of the database, the current data model reflecting any changes to the database up to when the current data model is obtained, wherein a current description of the user interface is created using the current data model of the database.

27. (Previously Presented) The method of claim 20 further comprising:

before the classifying, receiving a request from a client that the description be created, wherein receiving the request triggers the classifying of entities into entity types.

28-30. (Canceled)

31. (Previously Presented) A computer readable medium storing a computer program which when executed by at least one processor creates a description of a user interface that transacts with a database having a data model containing a plurality of entities, the description being created using the data model of the database, the computer program comprising:

a) instructions for classifying the plurality of entities into entity types, the instructions for classifying comprising instructions for:

determining whether a first entity in the plurality of entities satisfies a first set of conditions; and

classifying the first entity as a first entity type upon determining that the first entity satisfies the first set of conditions; and

b) instructions for creating the description of the user interface based upon the classification of the plurality of entities.

32. (Previously Presented) The computer readable medium of claim 31 wherein the description is a generic description configured to be interpreted in different platforms or operating environments.

33-34. (Canceled)

35. (Previously Presented) A method for generating a user interface that transacts with a database having a data model containing a plurality of entities, the method comprising:

receiving a description of the user interface, the description being based upon classification of the plurality of entities into entity types wherein the classification comprises classification of a first entity as a first entity type upon determination that the first entity satisfies a first set of conditions; and

generating the user interface using the description of the user interface.

36. (Previously Presented) The method of claim 35 further comprising:

before the receiving, sending a request that the description be created, wherein the request triggers the classifying of entities into entity types; and

after the generating, receiving data from the database in order to populate the user interface.

37. (Previously Presented) The method of claim 35 further comprising, before the receiving:

sending preferences for the user interface, the preferences being utilized in creating the description.

38. (Previously Presented) The method of claim 35 further comprising, before the receiving:

sending authentication information.

39-41. (Canceled)

42. (Previously Presented) A computer readable medium storing a computer program which when executed by at least one processor generates a user interface that transacts with a database having a data model containing a plurality of entities, the computer program comprising:

instructions for receiving a description of the user interface, the description being based upon classification of the plurality of entities into entity types wherein the classification comprises classification of a first entity as a first entity type upon determination that the first entity satisfies a first set of conditions; and

instructions for generating the user interface using the description of the user interface.

43. (Previously Presented) The computer readable medium of claim 42 wherein the description of the user interface is created using a current data model of the database, the current data model reflecting any changes to the database up to when the description is created.

44. (Previously Presented) The computer readable medium of claim 42 further comprising:

instructions for sending preferences for the user interface, the preferences being utilized in creating the description.

45. (Canceled).

46. (Previously Presented) A system comprising:

a database having a data model containing a plurality of entities; and

a server communicatively coupled to the database for creating a description of a user interface that transacts with the database, the description being based upon classification of the plurality of entities into entity types wherein the classification comprises classification of a first entity as a first entity type upon determination that the first entity satisfies a first set of conditions.

47. (Previously Presented) The system of claim 46 wherein the server obtains a current data model of the database, the current data model reflecting any changes to the database up to when the current data model is obtained, a current description of the user interface being created using the current data model of the database.

48. (Previously Presented) The system of claim 46 wherein the server is in persistent communication with the database.

49. (Previously Presented) The system of claim 46 wherein the server is communicatively coupled to a first client via a network and distributes the created description to the first client for enabling the first client to generate the user interface.

50. (Previously Presented) The system of claim 49 wherein the server provides the first client an only point of access to the database.

51. (Previously Presented) The system of claim 49 wherein the server is communicatively coupled, via the network, to a second client having a different platform or operating environment than the first client, and distributes the created description to the second client for enabling the second client to generate the user interface.

52. (Currently Amended) A computer comprising:

- a) a description of a data store;
- b) a browser; and
- c) an application for generating user-interface elements ~~based on by~~ using said description and by retrieving a data set from said data store to populate at least one user-interface element, said user-interface elements for ~~display~~ displaying in said browser ~~and for facilitating transactions with said data store~~, at least one user interface element for receiving queries for the data store.

53. (Previously Presented) The computer of claim 52 further comprising a storage for storing the description, the browser, and the application.

54-55. (Canceled)

56. (Currently Amended) The computer of claim 52, wherein said browser is a web browser, wherein said application is a distributed application running on said ~~the~~ web browser.

57. (Previously Presented) The computer of claim 56, wherein said distributed application is an applet.

58. (Previously Presented) A method comprising:

- a) receiving a first request for a first user interface to transact with a first data store;
- b) supplying a first description to generate the first user interface;

c) receiving a second request for a second user interface to transact with a second data store; and

d) supplying a second description to generate the second user interface, wherein said first and second descriptions differ.

59. (Currently Amended) ~~A~~ ~~The method of claim 58, wherein the first and second data stores are the same data store, wherein~~ for providing descriptions of user interfaces, the method comprising:

a) receiving a ~~the~~ first request ~~is received~~ from a first user;

b) receiving a ~~while the~~ second request ~~is received~~ from a second user, the first and second users having different roles; ~~wherein the first description is supplied to the first user while the second description is supplied to the second user and~~

c) supplying a first description to the first user and a second description to the second user, wherein the first and second descriptions are different based on the roles of the users.

60. (Currently Amended) The method of claim 59, wherein the first and second user interfaces comprises at least two user-interface elements for facilitating data transactions, wherein said first user interface comprises at ~~least~~ least one more user-interface element than said second user interface.

61. (Previously Presented) The method of claim 59, wherein the first and second user interfaces are displayed in an application running on different computers.

62. (Previously Presented) The method of claim 60, wherein the application is a web browser.

63. (Previously Presented) The method of claim 58, wherein the first and second data stores are the different data stores, wherein the first request is received from a first user while the second request is received from a second user different than the first, wherein the first description is supplied to the first user while the second description is supplied to the second user.

64. (New) A method of providing a user interface (“UI”), the method comprising:

- a) receiving a description of a data store from a server;
- b) generating UI elements based on the description;
- c) retrieving data from the data store to populate at least one UI element; and
- d) after generating and retrieving, providing the UI comprising the UI elements, the UI elements for performing queries on the data store.

65. (New) The method of claim 64 further comprising displaying at least one UI element, the UI element populated with retrieved data.

66. (New) A method of generating a user interface for transacting with a data store having a data model comprising a plurality of entities, the method comprising:

- a) receiving a platform-independent storage structure that includes a description of a data store;
- b) parsing the description to instantiate a plurality of objects that define user interface elements of the user interface; and
- c) generating the user interface by using the instantiated objects to define a display of the user interface elements in a browser; and
- d) receiving queries for data from the data store through the user interface.

67. (New) The method of claim 66, wherein the platform-independent storage structure comprises eXtensible Markup Language (“XML”).

68. (New) A method of generating a user interface for transacting with a data store, the method comprising:

- a) receiving a platform-independent application;
- b) receiving a storage structure that includes a description of the data store;
- c) from the description, having the application define user interface elements for display in a browser; and
- d) through the user interface elements, receiving queries for data from the data store.

69. (New) A method of generating a user interface for a client that interacts with a data store stored on a server, the method comprising:

- a) distributing a platform-independent application to the client;
- b) analyzing a data model of the data store to produce a description of storage structure entities of the data store; and
- c) distributing the description to the client for the application to convert the description into a plurality of user interface items.

70. (New) The method of claim 69, wherein the conversion of the description produces a plurality of data objects corresponding to the user interface items.

71. (New) The method of claim 69, wherein the analyzing comprises performing an automated analysis of the data model

72. (New) A computer readable medium storing a computer program for execution by at least one processor, the computer program comprising sets of instructions for:

- a) analyzing a data model of the data store to produce a description of the structure of the data store; and
- b) distributing the description to a client computer in a platform-independent storage structure, wherein the client computer parses the description into a plurality of data objects that define user interface items that the client computer displays in a browser.

73. (New) A method of generating a user interface that interacts with a data store, the method comprising:

a) receiving a description of storage structure entities of the data store, the description produced through an automated analysis of a data model of the data store; and

b) converting the description into a plurality of user interface items for display in a browser, the user interface items further for receiving queries on the data store.

74. (New) The method of claim 73, wherein the automated analysis is rule-driven.